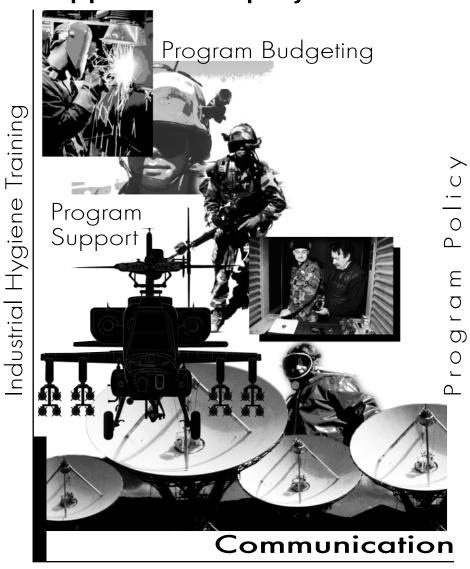
# Army Industrial Hygiene Program Strategy

## Support to Deployed Forces



Installation Programs

# U.S. ARMY INDUSTRIAL HYGIENE PROGRAM STRATEGY Preparing for Army XXI and Army After Next

ommanders require robust and active Industrial Hygiene support to make fully informed risk management decisions about hazardous exposures in the unpredictable and complex climate of military operations. This inaugural Industrial Hygiene Program Strategy lays out goals, objectives and actions which focus on improving support to our commanders, soldiers and civilians whether deployed or in garrison. It addresses the policy, budget, communication, program and training actions which will align the Strategy to both current responsibilities and its promise for support of Army XXI and The Army After Next.

America's Army constantly prepares to continue emergency relief, peace operations and, when necessary, combat missions around the world. We prepare by continuously engaging in tough, realistic training. Meeting these mission challenges means Army personnel often experience unique and potentially hazardous exposures as a managed risk during training or deployments. Army Industrial Hygiene supports readiness, health and quality of life objectives by addressing the risks of those exposures—Helping commanders ensure soldiers' risks are commensurate with mission benefits.

Industrial Hygiene provides critical support for the four core operational concepts of Army Vision 2010–Army's blueprint for its contribution to joint warfighting. Soldiers, ill or injured from preventable causes, can not fully participate in military operations designed using Dominant Maneuver and Precision Engagement principles. For Force Protection, Industrial Hygiene support is essential for maintaining the health of soldiers and civilians during their entire careers and especially during all phases of deployment. Industrial Hygiene professionals, and the tools they can deploy, are key to collection, analysis and maintenance of a soldier's total exposure during an entire career. By preventing illness or injury, Industrial Hygiene also supports Focused Logistics concepts by reducing medical treatment infrastructure deployment requirements.

This Industrial Hygiene Strategy also aligns well with the Government Performance and Results Act. It addresses the mission, business area, organization and resources available to provide this health service for all of America's Army. The Action Plan addresses the need to follow and analyze Program costs and benefits and to measure outcome performance from many viewpoints—Those of soldiers, their families, commanders and Army staff. We plan to closely monitor implementation during an annual analysis and review and to ensure recommended revisions to strategies, actions and performance measures become part of the next generation plan.

Integration of industrial hygiene and other health promotion and preventive medicine efforts supports Army readiness by maintaining and improving the health and quality of life of our soldiers and civilians. This strategy builds on our past accomplishments and provides the focus to meet the complex challenges of the next century.

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#### **PREFACE**

#### U.S. Army Industrial Hygiene Program Strategy

The U.S. Army Industrial Hygiene Program has the primary mission to support Army readiness by controlling the exposure of personnel to health hazards found where they work and serve. As one of two major components of the Army Occupational Health Program, it is a medical mission of Medical Command, with core functions executed primarily by personnel assigned to medical treatment facilities.

Despite the efforts of the Industrial Hygiene Program leaders, preventable illnesses and injuries that adversely affect the Army's soldiers and civilians continue to hamper operations, training, production and maintenance activities Army-wide. Compensation claims for those illnesses and injuries encumber funds better used elsewhere. We simply must improve the effectiveness of our efforts to provide industrial hygiene support.

To realize that improvement this formal Army Industrial Hygiene Program strategy focuses our efforts on seven major program areas of mission and mission support: support to deployed forces, installation programs, communication, industrial hygiene training, program policy, program budgeting and program support. Objectives and specific actions address the goals in each of these key areas. Implementation of this strategy will result in the Army's fielding weapon and other materiel systems that are free of uncontrolled health hazards. Initial program actions will focus on controlling health hazards in materiel systems and in high-hazard workplaces; reducing compensation claims; improving the health hazard awareness of leaders, supervisors, and workers and improving installation-based support.

Maintaining hazard-free workplaces at home and when deployed promotes efficiency, reduces illness, injury rates, and compensation claims and sustains healthy, fit, ready, and productive soldiers and civilians. We owe them nothing less than the best support possible.

BRIGADIER GENERAL PATRICK SCULLEY

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Commander, U.S. Army Center for Health Promotion and Preventive Medicine

#### **EXECUTIVE SUMMARY**

The U.S. Army Industrial Hygiene Program strategy reinforces the Army leadership's commitment to providing workplaces that are free of health hazards. It provides the framework for actions that will greatly improve the Army Industrial Hygiene Program's contribution to Army readiness and provides unity of direction and purpose for all of the program's activities.

This strategy consists of a vision and goals, objectives, and specific actions for each of the seven major program areas (support to deployed forces, program policy, program budgeting, installation programs, program support, communication, and industrial hygiene training). The Army's vision for its Industrial Hygiene Program is for the program to be a national leader in eliminating health hazards from the workplace. This strategy provides mid- and long-term direction and is the basis for developing the Strategic Action Plan (SAP). The SAP implements the strategy. This eight-year action plan corresponds to the Army planning, programming, and budgeting cycles. The SAP describes specific actions and tasks to be accomplished, sets milestones, assigns responsibility for each task and action, and estimates the cost of implementing and improving the program.

The Army will use this strategy to significantly improve the Industrial Hygiene Program. Our initial efforts will concentrate on reducing readiness deficiencies (training and operational restrictions) by eliminating or controlling health hazards from all high-hazard workplaces at home or deployed; eliminating or controlling health hazards from materiel systems; educating our military and civilian leaders, supervisors, and workers on the health hazards of their jobs; and reducing compensation claims attributable to preventable workplace illness and injury.

This strategy will also be the basis for planning, programming, and budgeting decisions for the U.S. Army Industrial Hygiene Program. The Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) [DASA(ESOH)] within the Office of the ASA (Installations, Logistics and Environment) [OASA(I,L&E)], the Office of the Army Surgeon General (OTSG), and the Headquarters Medical Command (MEDCOM) will receive periodic briefings on the status of the U.S. Army Industrial Hygiene Program and implementation of this strategy.

#### MAJOR PROGRAM AREAS

- Support to deployed forces
- Program policy

- · Program support
- · Program budgeting
- Communication
- Installation programs
- · Industrial hygiene training

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#### **VISION STATEMENT**

### The Army will Lead the Nation in Eliminating Health Hazards from the Workplace

The Army is comitted to providing a safe and healthful workplace for all soldiers, civilians, and contractor personnel by eliminating or controlling health hazards from all workplaces. The benefits of improved working conditions will include enhanced worker performance, improved morale, greater productivity, reduced lost time due to illness and injury, and reduced compensation costs. All of these benefits will conserve resources and enhance readiness.

#### **STRATEGY**

The Industrial Hygiene Program strategy provides the framework and direction needed to achieve the program's vision. This strategy establishes goals, objectives, and supporting actions for each of the seven major program areas:

- Support to deployed forces
- · Program policy
- Program budgeting
- Installation programs
- · Program support
- Communication
- Industrial hygiene training.



The strategy will help focus the strengths of the Army—its people, leadership, and organizations—on accomplishing the program goals and objectives.

This strategy is also the basis of a Strategic Action Plan (SAP) for the Army Industrial Hygiene Program, which provides the specific details required to implement the strategy. The SAP defines the responsible parties, milestones, and specific tasks required to achieve the objectives and goals set forth in the strategy.

#### GOALS, OBJECTIVES, AND ACTIONS

The success of the U.S. Army Industrial Hygiene Program depends on how well the key issues within the seven major program areas are addressed. The goal establishes the framework for each area. The objectives and supporting actions fill out the framework and are supported by specific tasks. These specific tasks, when accomplished in each area, move the program toward fulfilling the vision.

#### SUPPORT TO DEPLOYED FORCES

#### **GOAL**

The goal of industrial hygiene support to deployed forces is to preserve the health and effectiveness of soldiers and DA civilians directly involved in combat or stability operations by eliminating or controlling health hazards in the area of operation.

#### **OBJECTIVES**

Establish industrial hygiene's role in force medical protection and joint medical surveillance.

#### Supporting Actions

- Define the responsibilities of industrial hygiene in support of contingency operations.
- Incorporate these responsibilities into medical support doctrine.
- Assist the Army Medical Department (AMEDD) Center and School to identify and correct shortfalls in doctrine, training, and equipment.
- Assess the capability of current industrial hygiene resources to meet contingency requirements.



 Assist in the development of exposure standards for physical, chemical, and radiological hazards commonly encountered by soldiers during deployment.

Improve industrial hygiene support to deployed soldiers.

- Identify the activities performed during deployments and field training exercises that produce potential health hazards.
- Develop evaluation guides that focus on controlling the potential health hazards identified in deployments and field training exercises.
- Perform hazard evaluations, exposure monitoring, and data recording/archiving during deployments and field training exercises.
- Develop risk assessment protocols that enable industrial hygiene personnel to provide commanders with the information they need to make risk management decisions.

#### PROGRAM POLICY

#### GOAL

The goal of program policy is to provide clear, timely, and practical Industrial Hygiene Program policy.

#### **OBJECTIVES**

Revitalize the strategic planning process within the Industrial Hygiene Program.

#### Supporting Actions

- Institute strategic program planning at all levels within the Army Industrial Hygiene Program.
- Establish short-, mid-, and long-term goals, and report progress toward these goals to the Army leadership annually.
- Update the Industrial Hygiene Program strategy and the SAP, as needed, to provide clear program direction.

Review, revise, and develop program policy documents.

#### Supporting Actions

- Develop procedures to meet the policy development and revision requirements.
- Prioritize policy documents for development, review, and revision.
- Provide timely guidance for implementing new requirements.

Forge a better working relationship with the Army Safety Program.

#### Supporting Actions

- Lead the effort to reinstate the Safety, Health, and Environment consortium.
- Work with the Army safety community to publish a capstone occupational safety and health (OSH) regulation and supporting pamphlets to facilitate unification of the Army's OSH Program.
- Identify specific actions that can be taken to promote cooperation and sharing of resources and information between industrial hygiene and safety programs at all levels.
- Lead the effort to develop one health and safety information database.

Identify and resolve programmatic issues in priority order.

- Identify and prioritize Army Industrial Hygiene Program issues for resolution.
- Develop specific actions to resolve the issues.
- Develop follow-up procedures to verify the effectiveness of actions taken.

#### PROGRAM BUDGETING

#### **GOAL**

The goal of program budgeting is to budget adequate resources to implement an effective Industrial Hygiene Program.

#### **OBJECTIVES**

Improve existing methods used to identify the Army Industrial Hygiene Program requirements and their associated costs.

#### Supporting Actions

- Identify all of the activities and tasks that must be performed to sustain an effective and productive program.
- Determine the cost associated with sustaining an effective program.
- Document the costs, including the cost of compliance with existing laws, regulations, and accepted standards of practice.

Provide proactive, timely, and well-justified input to the Army budget process.

#### **Supporting Actions**

- Determine the support that the MEDCOM needs to meet the Army budget process requirements.
- Establish procedures to ensure Industrial Hygiene Program representation at all key program and budget meetings.
- Develop the tools necessary to support the budget process.
- Develop the justification for the Industrial Hygiene Program input to the Army budget.

Develop methods to clearly illustrate the cost savings associated with effective Industrial Hygiene Programs.

- Review existing methods to calculate cost savings.
- Adapt existing methods for Army use.
- Develop effective indicators of program cost-effectiveness.
- Develop methods to present cost savings information to Army and installation leaders.



#### INSTALLATION PROGRAMS

#### GOAL

The goal of installation programs is to provide safe and healthful workplaces.

#### **OBJECTIVES**

Improve installation Industrial Hygiene Program management and execution.

#### Supporting Actions

- Establish clearly defined program goals, objectives, and actions and report the program status to medical and installation leaders.
- Use the Health Hazard Information
   Module (HHIM) as one of the primary
   tools for storing and analyzing information
   about management of installation
   programs.
- Conduct Industrial Hygiene Program selfassessments and use the results to improve the program and determine the external support that is needed.
- Prioritize program elements for execution.
- Target potential high-hazard operations for evaluation and control.

Provide support to AMEDD proponency programs.

#### Supporting Actions

- Perform workplace hazard evaluations, exposure monitoring, and data recording in support of the programs for hearing conservation, vision conservation, ergonomics, occupational medicine and nursing, medical radiation protection, respiratory protection, and medical treatment facilities.
- Maintain close coordination with the managers of each of these installation



AMEDD proponency programs to share scarce resources and lessons learned.

 Provide data from the HHIM workplace exposure assessments to each of these program managers.

Provide support to non-AMEDD proponency programs.

- Improve hazard communication training for chemical, physical, and biological hazards.
- Develop generic training aids and packages targeted at supervisors of personnel in high-hazard operations.
- Stay abreast of regulatory changes and serve as the medical technical expert for these (non-AMEDD) programs.
- Continue to provide technical assistance and support to the installation's programs for asbestos abatement, hazardous and medical waste, indoor air quality, civilian resource conservation, confined space entry, and chemical surety.
- Support the installation safety officer in performing the Standard Army Safety and Occupational Health Inspection (SASOHI).

#### PROGRAM SUPPORT

#### **GOAL**

The goal of program support is to provide timely, focused support to the Army Industrial Hygiene Program worldwide.

#### **OBJECTIVES**

Deliver well-coordinated support services that meet customers' needs.

#### Supporting Actions

- Establish clear priorities for field service support, and target support to those needs.
- Publish clear guidance that defines the roles and responsibilities for providing industrial hygiene support to all customers worldwide.
- Establish procedures to follow up on all field support actions.
- Provide high-quality, timely, laboratory support for the Industrial Hygiene Program.
- Provide state-of-the-art equipment and equipment management support.
- Improve working relationships with all customers.



Maintain centers of excellence in all Industrial Hygiene Program disciplines.

#### Supporting Actions

- Maintain state-of-the-art industrial hygiene capabilities.
- Publish technical guidance documents to support the Industrial Hygiene Program.
- Track changing regulations, discern their impact on the Army Industrial Hygiene
   Program, and develop position papers, as needed.
- Establish quality assurance mechanisms for all support provided.

Provide Industrial Hygiene Program management support.

#### Supporting Actions

- Provide assistance to installations in the management of their Industrial Hygiene Programs.
- Develop Industrial Hygiene Program effectiveness and status indicators.
- Develop an Industrial Hygiene Program status report for all command levels.
- Continue to support the expansion and improvement of the HHIM.

Develop an effective audit program that leads to improved Industrial Hygiene Program performance.

- Establish proponency for the audit program.
- Develop audit criteria that are consistent with current state-of-the-art guidance.
- Establish clear guidance on conducting audits and using audit findings.
- Develop procedures for correcting deficiencies identified during audits.

#### COMMUNICATION

#### GOAL

The goal of communication is to establish effective communication throughout the Army Industrial Hygiene Program.

#### **OBJECTIVES**

Improve communication within the program and with the Army leadership.

#### Supporting Actions

- Improve procedures to effectively disseminate policy, technical, programmatic, and lessons-learned information.
- Develop closer working relationships with all Army Industrial Hygiene Program organizations.
- Develop procedures and tools to demonstrate the value of Industrial Hygiene Programs.
- Develop tools to assist installation personnel to demonstrate the value of their Industrial Hygiene Program to commanders and other installation leaders.

#### INDUSTRIAL HYGIENE TRAINING

#### **GOAL**

The goal of industrial hygiene training is to provide personnel with sufficient training to be able to execute the Army Industrial Hygiene Program competently and effectively.

#### **OBJECTIVES**

Establish an Industrial Hygiene Career Program.

#### Supporting Actions

- Develop an industrial hygiene career program.
- Incorporate career program guidelines into all program-sponsored training.



- Establish organized recruiting, training, and professional development.
- Become involved with national associations in their efforts to define the profession of industrial hygiene.

Provide training that meets documented needs, improves program implementation, supports career progression, and leads to certification.

- Develop methods to clearly define training needs.
- Present centrally funded training classes and symposia targeted to identified needs.
- Develop training materials for healthhazard awareness that are targeted at the military community.
- Support the training requirements specified in new and existing regulations.
- Establish improved support to the AMEDD Center and School.
- Develop procedures to determine the effectiveness and use of the training provided.
- Establish a recordkeeping system for industrial hygiene training.
- Support training leading to certification in comprehensive industrial hygiene practice.

#### STRATEGY IMPLEMENTATION

# THE ARMY STRATEGIC ACTION PLAN

The Industrial Hygiene Program is implemented through the SAP. The SAP is the primary program management mechanism for identifying and integrating strategic Industrial Hygiene Program issues into a coordinated programmatic effort. This plan establishes the



responsibility, timelines, and order of priority for tasks to achieve the program goals and objectives. The SAP will be implemented, revised, and monitored by a working group consisting of representatives from all levels of the program and senior Army Industrial Hygiene Program leaders. The working group will develop program management indicators and use these indicators as the primary tool for determining the status of the program and the program's progress in implementing the SAP. The management indicators will form the basis of the periodic reviews. These in-process reviews will be presented to the Army leadership at least annually.

# DEVELOPING THE PROGRAM BUDGET

#### The Army Budget Process

The Planning, Programming, Budgeting, and Execution System (PPBES) is the Army component of the cyclic (biennial) DoD process that is used to develop DoD's budget. PPBES provides the framework for making decisions on current and future programs.

It is the Army's primary strategic management system for allocating and managing resources. The objectives of the PPBES are as follows:

- To focus Army functional activities on the priorities and policy during all phases of the PPBES
- To size, structure, man, equip, and train the force—through planning
- To allocate available manpower, dollars, and materiel among competing requirements according to resource allocation policy and priorities—through programming
- To convert program decisions on dollars and manpower into requests for congressional appropriations—through budgeting





 To apply resources to achieve approved program objectives and to adjust resource requirements on the basis of execution feedback—through program execution.

The PPBES cycle is an eight-year process consisting of the current year, the budget year (one year out from the current year), and the six planning years referred to as the program objective memorandum (POM) years. The Army Industrial Hygiene Program requirements must be clearly identified in the Army PPBES process. These requirements are best addressed within the MEDCOM input to the POM.

Industrial Hygiene Program Planning, Programming, Budgeting, and Execution System

The identification of program requirements at each of the Army installations forms the cornerstone of the industrial hygiene PPBES process. This process is much more than just submitting a yearly budget; it involves planning and programming for future requirements. Requirements in terms of labor, equipment, training, travel, contracts, printing and reproduction, supplies, and administrative costs should be projected to follow the Army's eight-year budget cycle (current year, budget year, and six POM years). This type of planning will enable Industrial Hygiene Program leaders to project Army program requirements

accurately, provide well-documented and well-justified input to the MEDCOM POM process, to the Army POM, and to other PPBES documents. These efforts should, in time, result in outyear budget allocations that more closely meet program requirements.

The other key role for all installation Industrial Hygiene Program managers involves tracking execution of the budget for the program according to the appropriate Army management structure (AMS) codes. The AMS codes enable definitive tracking of dollars spent on the program. This tracking is necessary to align budget allocations with budget executions and to identify discrepancies. Organizational resource managers can provide detailed information on the AMS codes and their use.

#### MONITORING AND REPORTING

The *U.S. Army Industrial Hygiene Program*Strategy is a living document. The goals, objectives, and supporting actions set forth in this document will be modified as needed to reflect new program challenges, new or changed regulations, completion of supporting actions and objectives, or revised guidance from senior Army leadership. The MEDCOM/OTSG staff will monitor the progress of the SAP working group in accomplishing the prioritized tasks in the SAP and will brief the Army leadership annually on the program progress and status.



# STRATEGY ELEMENTS AND DEFINITIONS Appendix A

#### Strategy

The strategy provides a framework for planning, programming, budgeting, setting priorities for actions, and evaluating the U.S. Army Industrial Hygiene Program. The strategy begins with a vision statement and includes goals, objectives, and supporting actions.

#### Vision Statement

The strategy begins with senior Army leadership's vision for the Army Industrial Hygiene Program. The vision provides a clear direction for the program and serves as the basis for unifying the efforts within the program.

#### Major Program Areas

The major program areas within the Army Industrial Hygiene Program are support to deployed forces, program policy, program budgeting, installation programs, program support, communication, and industrial hygiene training.

#### Goals

Each major program area has an overarching goal that establishes the major direction and focus for each key issue. These goals set the direction for the supporting objectives, actions, and tasks.

#### **Objectives**

Each goal is supported by one or more objectives that begin the process of focusing efforts on specific actions to implement the strategy.

#### Supporting Actions

Actions form the basis of the Strategic Action Plan (SAP), which is the companion document for implementing this strategy. Many of these actions are time sensitive and have specific milestones for their performance. The actions are also supported by tasks and subtasks that are prioritized in the SAP.

# SUPPORTING THE TOTAL ARMY Appendix B

The U.S. Army Industrial Hygiene Program provides comprehensive support to the total Army. This appendix offers a few examples of how the program provides this support to the Army, its soldiers and civilians, materiel systems, and installations.

#### DIRECT SUPPORT TO SOLDIERS

Army industrial hygienists support our soldiers and civilians during deployments. During recent deployments to Haiti and Bosnia, industrial hygienists and other preventive medicine specialists have been working closely with Logistics, Maintenance, and other support personnel to locate facilities in areas that are uncontaminated by toxic industrial chemicals. Industrial hygienists are also working to locate Logistics and Maintenance activities so that



emissions from these activities do not adversely impact other soldiers. Our experience has shown that performing vehicle maintenance and repair activities; handling petroleum, oils and lubricants; distributing supplies and other activities that support the deployed force infra-



structure all create health hazards to the operators and in some cases adjacent soldiers. These health hazards tend to increase in number and complexity during deployments due to lack of facilities and increased need to get the job done. Industrial hygienists focus on the control and elimination of these hazards. Their efforts keep the soldiers safe, healthy, and on the job.

# ARMY WEAPONS AND OTHER MATERIEL SYSTEMS

Army industrial hygienists work with system program managers and other members of the Manpower and Personnel Integration (MAN-PRINT) team to assess potential health hazards early in the Acquisition and Development Process. We have been successful in identifying and resolving a variety of health hazards in major weapon systems, including the M1A1 and M1A2 Abrams tanks; the Improved Ribbon Bridge transporter; the Improved Medivac helicopter; the Battalion Mortar System; and the Patriot, Fox, Paladin, Javelin, Avenger, and Hawk missiles. We have also

been successful in working to eliminate health hazards from nonmajor systems, including the Future Armored Supply Vehicle, Electric Generator/Environmental Control System, Chemical and Biological Shelters, Nondivisional Aviation Intermediate Maintenance Shop Set, propellant charges, cartridges, smokes and obscurants, and water treatment units. The timely input of Army industrial hygienists — from concept through fielding — has supported fielding of weapon and materiel systems that integrate the soldier into the total system and give Army soldiers the decisive edge.

#### TOTAL ARMY SUPPORT

#### CHEMICAL SURETY

Army industrial hygienists have been deeply involved in the chemical surety program for many years. Much of their involvement has been in the review and evaluation of demilitarization facilities, specifically the containment and ventilation systems. Industrial hygienists consistently supported the chemical demilitarization facility at Johnson Atoll, often participating in critical reviews and responding immediately to requests for assistance. They





have also been heavily involved with the evaluation of the design and performance testing of the facilities at the Toole Army Depot in Utah. Recently, Army industrial hygienists have helped develop and test monitoring systems for toxic chemical storage and use sites. Often Army industrial hygienists perform independent evaluations of contractor-constructed and operated facilities. Such evaluations are integral to the overall Army chemical surety mission.

#### THE INSTALLATION BASE

A major focus of the Army Industrial Hygiene Program is on maintaining safe and healthful working conditions for soldiers and civilians at all Army installations. Installation industrial hygienists work closely with Department of Public Works, safety, environmental, and other medical personnel to provide workplaces that are free from health hazards. Specifically, installation industrial hygienists implement comprehensive work-site surveillance programs that identify potential health risks and then act to eliminate or control the risks. They also work closely with managers, supervisors, and workers to ensure they are aware of the health risks associated with work and the best ways to minimize those risks. The bottom line

is that the Army Industrial Hygiene Program works to maintain hazard-free workplaces that promote efficiency; reduce illness and injury rates and their associated lost time and compensation costs; and help sustain Army soldiers and civilians so they are healthy, fit, and productive.

#### **DESIGN REVIEW**

Army industrial hygienists work closely with facility design engineers to identify design shortfalls in new construction and renovation projects as well as in the development and revision of military design specifications. Much of the work involves reviewing the plans for renovating facilities or installing process control systems. In nearly every design review performed, the identification of design deficiencies prevents construction of substandard facilities that would require additional, needless modification. This was especially true in previous years when design reviews of projects for the National Guard Bureau saved an estimated \$500,000 in direct costs. These savings do not include the costs associated with retrofitting the facilities to bring them into compli-



ance with required specifications. Industrial hygienists also review the design of ventilation systems. Invariably, these reviews identify ways to improve the ventilation systems and save energy. These reviews not only save money in the design, but also in system operation, which results in savings that continue to accrue year after year.

# THE ARMY ENVIRONMENTAL PROGRAM

Army industrial hygienists work closely with Army environmental program managers. The primary areas of emphasis include training installation personnel to meet requirements for certifying hazardous-waste operators and emergency responders; reviewing and developing site-specific safety and health plans; evaluating lead-based paint in housing facilities; and supporting on-site hazardous-waste remediation activities, such as the one for nonstockpile chemical munitions at the Spring Valley site. In each case, the support provided by the Army industrial hygienists was technically superb. This support was provided at a fraction of the cost commercial contractors would have charged. One good example of this cost savings was the evaluation, sampling, and analysis of samples for lead-based paint at Fort Ord, California. The Fort Ord engineer stated that these efforts enabled him to turn over the family housing units on time and save more than \$200,000 compared with the cost of using a commercial contractor.

#### **COMMENTS AND SUGGESTIONS**

### U.S. Army Industrial Hygiene Program Strategy

The *U.S. Army Industrial Hygiene Program Strategy* is a living document that must be continually updated to address current and changing issues. It was developed through an extensive participatory process involving personnel at all levels and from a wide range of functional specialties. The Army's senior leadership is committed to this strategy.

We solicit your input. Please provide your comments, concerns, and suggestions to us. In keeping with our commitment to move forward in the electronic age, we ask that you provide your comments via electronic mail to

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Those without e-mail capability can fax or phone in their comments:

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